(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 21 May 2004 (21.05.2004)

PCT

(10) International Publication Number WO 2004/043011 A1

(51) International Patent Classification⁷: 29/06

H04L 12/42,

(21) International Application Number:

PCT/CN2002/000792

(22) International Filing Date:

6 November 2002 (06.11.2002)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): WUHAN FIBERHOME NETWORKS CO., LTD. [CN/CN]; 88 Youkeyuan Lu., Hongshan District, Wuhan City, Hubei 430074 (CN).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): YU, Shaohua [CN/CN]; 88 Youkeyuan Lu, Hongshan District, Wuhan City, Hubei 430074 (CN).
- (74) Agent: LIU, SHEN & ASSOCIATES; A0601, Huibin Building No. 8, Beichen Dong Street, Chaoyang District, Beijing 100101 (CN).

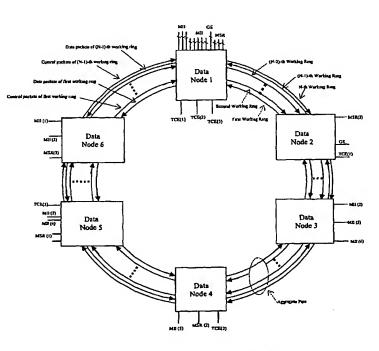
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTIPLE SERVICE RING OF N-RINGLET STRUCTURE BASED ON MULTIPLE FE, GE AND 10GE



The Topology of Multiple Services Ring

(57) Abstract: The present invention presents Link Encapsulation Protocol (LEP) used to Multiple Services Ring (MSR) based on FE/GE/10GE aggregates in the way of pre-plan and connection based. LEP is provided for specific use on a N-ring structure (N=1, 2, 3, 4, 5, ...,) consisting of the unidirectional (N-M) ringlets and M (I≤ M